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Nebraska Leads in Irrigated Land

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CORNHUSKER ECONOMICS

Nebraska Leads in Irrigated Land

Nebraska is #1. According to the most recent U.S. 2007 Census of Agriculture (released in February of this year), Nebraska now has more irrigated farmland than any other state. It is common knowledge to observers of our agricultural economy that our state has been in an irrigation expansion mode for several years. But what may be surprising to many is that simultaneously, other major irrigation areas of the country have witnessed reduced irrigated acreage.

Looking at the top five states in terms of irrigated acres over the three census benchmark years of 1997, 2002 and 2007, Nebraska added 560,000 acres from 1997 to 2002, and another 930,000 acres between 2002 to 2007 (Figure 1 on next page).

By the end of 2007, Nebraska had 8,560,000 acres under irrigation. In contrast, California, which historically has exceeded all other states, dropped their irrigated acreage by nearly 900,000 acres between 1997 and 2007, with the bulk of that decline occurring between 2002 and 2007. Multi-year drought conditions and the ever-growing demands for water by California's metro areas have, no doubt, contributed to this decline in irrigated acreage. And given the population pressures for water, it is virtually certain that California's irrigated acres will continue to decline. As for the other major irrigated states, only Arkansas has experienced consistent growth over time. In fact, Texas, which shares part of the vast Ogallala Aquifer with Nebraska, has experienced reduced irrigated acreage of some 750,000 acres between 1997 and 2007, as aquifer levels have declined.

Not only is Nebraska's volume of irrigated acreage significant, accounting for about one out of every six acres of irrigated land in the U.S., but the **quality** of our irrigated agriculture is impressive as well. The bulk of the state's irrigated acreage, about three out of every four acres, is under center-pivot irrigation. In 2005, there were an estimated 52,000 center pivot systems operating in Nebraska and, obviously, that number has continued to increase up to the pre-

Market Report	Yr Ago	4 Wks Ago	6/5/09
<u>Livestock and Products,</u>			
<u>Weekly Average</u>			
Nebraska Slaughter Steers, 35-65% Choice, Live Weight.	\$93.76	\$83.91	\$82.25
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb.	125.58	114.40	113.77
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb.	114.62	98.67	100.88
Choice Boxed Beef, 600-750 lb. Carcass.	156.90	146.10	141.39
Western Corn Belt Base Hog Price Carcass, Negotiated.	71.85	57.75	55.48
Feeder Pigs, National Direct 50 lbs, FOB.	36.86	59.56	42.00
Pork Carcass Cutout, 185 lb. Carcass, 51-52% Lean.	77.89	57.10	56.46
Slaughter Lambs, Ch. & Pr., Heavy, Woolled, South Dakota, Direct.	116.75	94.00	114.25
National Carcass Lamb Cutout, FOB.	264.84	245.81	256.77
<u>Crops,</u>			
<u>Daily Spot Prices</u>			
Wheat, No. 1, H.W. Imperial, bu.	7.85	5.53	5.95
Corn, No. 2, Yellow Omaha, bu.	6.19	4.06	4.20
Soybeans, No. 1, Yellow Omaha, bu.	13.55	11.03	12.17
Grain Sorghum, No. 2, Yellow Dorchester, cwt.	10.46	6.14	6.86
Oats, No. 2, Heavy Minneapolis, MN, bu.	3.92	2.13	2.61
<u>Feed</u>			
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185 Northeast Nebraska, ton.	195.00	190.00	*
Alfalfa, Large Rounds, Good Platte Valley, ton.	77.50	77.50	*
Grass Hay, Large Rounds, Premium Nebraska, ton.	*	85.00	*
Dried Distillers Grains, 10% Moisture, Nebraska Average.	170.00	141.00	148.00
Wet Distillers Grains, 65-70% Moisture, Nebraska Average.	60.75	49.75	51.50
*No Market			

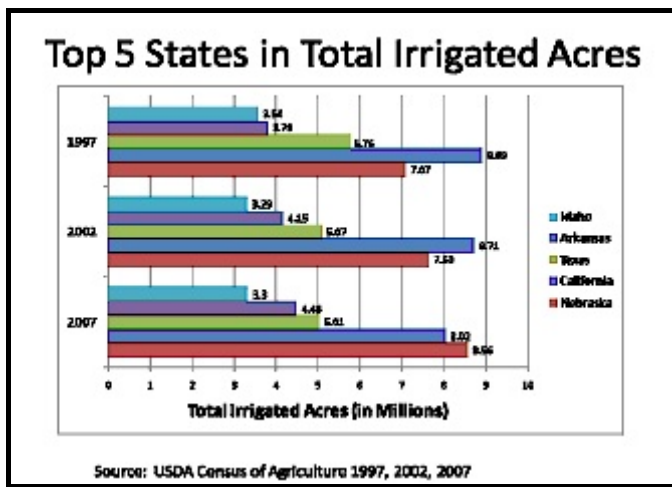


Figure 1.

sent. Center pivot technology, which essentially had its initial roots in Nebraska, has proven to be a very efficient means of irrigation, with considerably higher levels of water application efficiency than what is possible under gravity-forms of irrigation.

Our state's irrigated acreage is spread across all 93 counties, but there is considerable variation to be sure (Figure 2).

Areas of the state not overlaying the Ogallalla Aquifer, such as extreme Southeast Nebraska, and areas with more marginal cropland such as the Western Sandhills Region, have very limited acreage under irrigation. In contrast, there are counties where the majority of cropland is presently being irrigated.

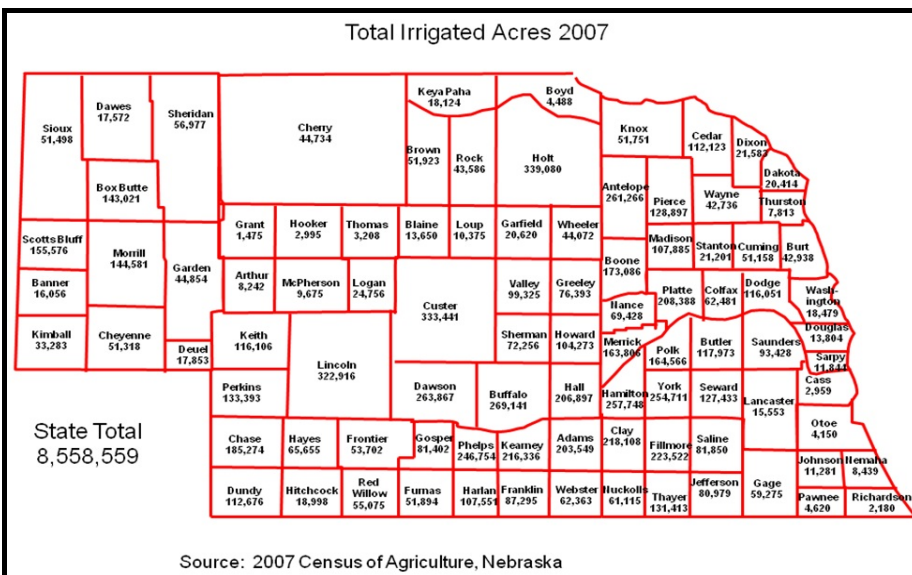


Figure 2.

Table 1 lists the top 25 counties in terms of irrigated acreage in 2007, and their respective changes in acreage over the previous five years. Custer and Lincoln counties experienced the largest increases over the time period, 61 and 56 percent, respectively.

Although Nebraska is the leading state in irrigation, the state has essentially reached its maximum development limits.

Table 1. Top 25 Nebraska Counties in Terms of 2007 Total Irrigated Acres

County	Irrigated Acres		2002-2007 Change in Irrigated Acres	
	2007	2002	Acres	Percent
Holt	339,080	234,509	104,571	44.6
Custer	333,441	207,230	126,211	60.9
Lincoln	322,916	207,412	115,504	55.7
Buffalo	269,141	233,569	35,572	15.2
Dawson	263,867	255,508	38,359	17.0
Antelope	261,266	225,403	45,863	15.9
Hamilton	257,748	267,590	-9,842	-3.7
York	254,711	241,525	13,186	5.5
Phelps	246,754	250,548	-3,794	-1.5
Fillmore	223,522	201,608	21,914	10.9
Clay	218,108	201,394	16,714	8.3
Kearney	216,366	215,838	498	0.2
Platte	208,388	178,523	29,865	16.7
Hall	206,897	187,021	19,876	10.6
Adams	203,549	198,555	4,994	2.5
Chase	185,274	169,176	16,098	9.5
Boone	173,086	162,088	10,998	6.8
Polk	164,566	143,646	20,920	14.6
Merrick	163,806	176,068	-12,262	-7.0
Scottsbluff	155,576	172,955	-17,379	-10
Morrill	144,581	123,031	21,550	17.5
Box Butte	143,021	132,854	10,167	7.7
Perkins	133,393	121,683	11,710	9.6
Thayer	131,413	133,066	-1,653	-1.2
Pierce	128,897	115,069	13,828	12.0

Major portions of Nebraska are already designated as either fully appropriated, or over appropriated. In addition, the Lower Platte Basin, which accounts for much of the remaining irrigated areas of the state is not yet fully developed, but will still have significant limitations on further groundwater development as a result of legislation passed in April of this year (see April 22, 2009 *Cornhusker Economics*). In short, there is no more development frontier. From now on, Nebraskans, from the individual water user up through our policy arena, will need to wisely manage our water resources for a sustainable future.

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